# **Bloomenergy**<sup>®</sup>

11/22/2016

Melanie Bachman Connecticut Siting Council Ten Franklin Square, New Britain, CT 06051

RE: Petition NO. 1260 – Petition of Bloom Energy Corporation, as agent for Frontier Communications Corporation, for a Declaratory Ruling for the Location and Construction of a 400kW Fuel Cell Customer Side Distributed Resource at 2 Washington Street, Norwalk, CT 06854

Dear Ms. Bachman,

We are submitting an original and fifteen (15) copies of the interrogatories response for Petition NO. 1260.

Sincerely

Justin Adams

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(860) 839-8373

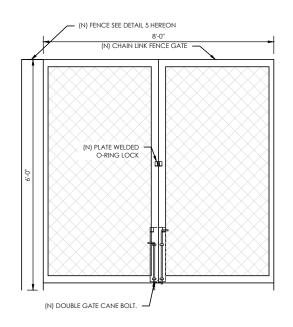
### Petition 1260 Interrogatory Response

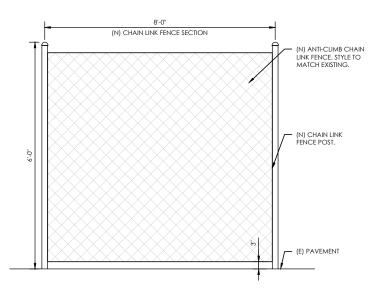
- 1. Bloom compiled monthly electric usage data for the building and sized the facility to provide enough power to meet 80% of the average electric base load for the building under normal operating conditions.
- 2. No. What would otherwise be considered waste heat is instead used internally to increase the electrical efficiency of the fuel cell system. As a result there is no useful waste heat generated by the fuel cell. The minimal amount of thermal load present at the host site would preclude the efficient deployment of a combined heat and power application.
- 3. The proposed facility will displace less efficient fossil fueled marginal generation on the NE ISO system. Based upon US EPA "eGrid" data the proposed facility is expected to reduce carbon emissions by more than 25% while essentially eliminating local air pollutants like NOx, SOx, and particulate matter.
- 4. Bloom systems do not create such substances. However, public pipeline natural gas supplied to homes and businesses can include sulfur oxides and other naturally occurring elements, such as benzene. Bloom's desulfurization units contain a catalyst designed to remove the sulfur from the gas before it reaches the fuel cell. In this process, the catalyst may also pick up some benzene and in some cases exceed the RCRA threshold. The catalysts are sent to a central location and processed by a qualified facility in Texas.
- 5. No gaseous substances are released or vented at any point during the desulfurization process.
- 6. There is no discharge points or connections to the fuel cell.
- 7. Natural gas is the media used for the pipe cleaning procedures described on page 4 of the petition.
- 8. Bloom will install a 1-inch mesh anti-climb fence around the fuel cell installation, including the section currently marked as "to remain." A detail of the fence is attached as Exhibit 13 and will be included in the final plan set issued for construction.
- 9. Bloom anticipates construction to start in April 2017 with 6-8 weeks of total construction time (2 weeks of site prep, 2 weeks of installation, and 2 weeks of commissioning). Norwalk permits noise generated by any construction equipment during daytime hours only. Norwalk defines daytime hours between 7:00 a.m. and 8:00 p.m., Monday through Friday, the hours between 8:00 a.m. and 8:00 p.m. on Saturday and the hours 9:00 a.m. through 8:00 p.m. on Sundays and federal and state holidays. We anticipate construction to only occur during daytime hours

Monday through Friday. If work is required on weekends and/or state and federal holidays, Bloom would only work during the prescribed daytime hours.

10. The cumulative emissions would not exceed the standard under any circumstances. The standard is stated in lbs/MW-hr and the emissions rate (735-832 lbs/MW-hr) is the same irrespective of the size of the project. It is also not necessary to revise Table 2 since the emissions rates would not increase due to the size of the project. As stated in the petition, fuel cell system generators are exempt from the DEEP emissions regulations per Section 22a-174-42(b)(3)(C). Even though the fuel cell systems are exempt from the emissions requirements, Bloom Energy does meet the emissions standards of Section 22a-174-42. Per Section 22a-174-42(e)(1)(A) a certification by the California Air Resources Board pursuant to Title 17, sections 94200 through 94214 of the California Code of Regulations meets the requirements of the DEEP Section 22a-174-42. The Bloom Energy fuel cells are certified under the California Air Resources Board (CARB) distributed generation program. Here is the link to CARB's distributed generation certification website: <a href="http://www.arb.ca.gov/energy/dg/eo/eo-current.htm">http://www.arb.ca.gov/energy/dg/eo/eo-current.htm</a>.

## Exhibit 13



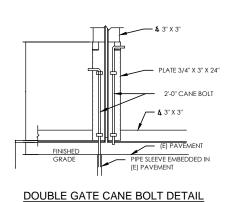


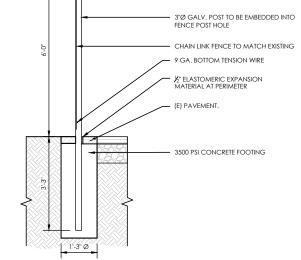
### FENCE GATE DETAIL

#### CHAIN-LINK FENCE SECTION DETAIL

- 1 5/8"Ø GALV. TOP RAIL

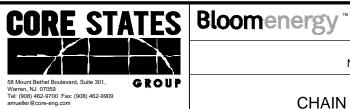
POST CAP





FENCE POST DETAIL

Job#: BEC-21228 Scale: N.T.S. 11/22/2016 Date: Drawn By: MDS



1299 Orleans Drive, Sunnyvale CA, 94089 Tel: 408 543 1500 Fax: 408 543 1501

2 Washington St. Norwalk, CT 06854

**EXHIBIT** CHAIN LINK FENCE DETAIL